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EXAMINER	
STOYNOV, STEFAN	
ART UNIT	**PAPER NUMBER**
2116	

DATE MAILED: 12/20/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/605,006	YU ET AL.	
	Examiner	Art Unit	
	Stefan Stoynov	2116	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *31 August 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-18* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-18* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *31 August 2003* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 9, 10, 13, and 16 are rejected under 35 U.S.C. 102(e) as being anticipated by Yang et al., US Patent Appl. Pub. No. 2004/0049704.

Re claim 9, Yang discloses a power management system (paragraph 0001, lines 1-4) of a portable computer (paragraph 0007, lines 1-5) comprising:

an AC/DC adapter for transforming AC voltage to constant DC voltage and providing the portable computer with the DC voltage;

[Yang does not specifically state an AC/DC adapter for transforming AC voltage to constant DC voltage. However, Yang discloses DC current sent out from a rectifier, supplying DC power to the whole system (paragraph 0025, lines 7-8, FIG. 1, 108, 134). It is well known in the art that an AC/DC adapter incorporates a rectifier, and thus Yang inherently discloses an AC/DC adapter for transforming AC voltage to constant DC voltage and providing the portable computer with the DC voltage].

a current sensor electrically with the AC/DC adapter for sensing an output current of the AC/DC adapter (paragraph 0025, lines 4-8, paragraph 0045, lines 3-5, FIG. 1, 102, 108, 134, FIG. 4, 401);

a comparator electrically connected with the current sensor for comparing the output current of the AC/DC adapter with a reference current (paragraph 0014, lines 1-5, paragraph 0025, lines 4-8, paragraph 0026, lines 1-5, paragraph 0027, lines 6-14, paragraph 0045, lines 5-8, FIG. 4, 402), and if the output current of the AC/DC adapter is grater than the reference current, the comparator outputting an alarm signal (paragraph 0014, lines 8-11, paragraph 0027, lines 9-14, paragraph 0045, lines 11-14, FIG. 4, 403); and

a logic circuit electrically connected with the comparator (FIG. 1, 110, 116) for analyzing the alarm signal (paragraph 0029, lines 1-5, paragraph 0043, lines 1-5, paragraph 0045, line 14-25), and if the alarm signal conforms to a predetermined standard (paragraph 0027, lines 6-14), the logic circuit controlling operations of the portable computer to reduce the power of the portable computer received from the AC/DC adapter (paragraph 0029, lines 1-18, paragraph 0031, lines 27-32, paragraph 0034, lines 11-16, paragraph 0045, lines 11-32).

Re claim 10, Yang further discloses the power management system, wherein the current sensor comprises a potential difference detecting circuit connected in parallel with a resistor of the portable computer for detecting the potential difference between the two ends of the resistor so as to read the output current of the AC/DC adapter (FIG. 1, 102, 104, paragraph 0036, lines 1-7, FIG. 2, 102, R1).

Re claim 13, Yang further discloses the power management system, wherein the logic circuit reduces the power of the portable computer received from the AC/DC adapter by reducing a working frequency of a central processing unit (CPU) or the portable computer (paragraph 0029, lines 1-20, paragraph 0043, lines 1-20, paragraph 0045, lines 19-32, FIG. 4, 403-408).

Re claim 16, Yang further discloses the power management system, wherein the portable computer comprises a basic input/output system (BIOS), and the logic reads and implements a program code of the BIOS so as to analyze the alarm signal (paragraph 13-21, paragraph 0029, lines 1-14, paragraph 0043, lines 1-16).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The factual inquiries set forth in *Graham* **v.** *John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-3, 6, 11, and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al., US Patent Appl. Pub. No. 2004/0049704 in view of Bell, US Patent No. 5,723,970.

Re claim 1, Yang discloses a power management system for controlling power of a portable computer with all claim limitations as per claim 9. In addition, Yang discloses a current sensor comprising a potential difference detecting circuit connected in parallel with the sense resistor for detecting the potential difference between two ends of the sense resistor so as to

read an output current of the AC/DC adapter (FIG. 1, 102, 104, paragraph 0036, lines 1-7, FIG. 2, 102, R1).

Yang fails do disclose a charger for charging a battery of the portable computer, the charger comprising a sense resistor electrically connected with the AC/DC adapter.

Bell teaches an AC/DC power converter used in notebooks providing power to both DC/DC converter and battery charger (column 3, lines 49-51, lines 55-56, FIG. 1, 18, 12, and 20). In addition, Bell teaches a control circuit monitoring both the charging voltage and charging current, controlling them in accordance with a battery charging profile (column 5, lines 49-53). Bell further teaches the control circuit incorporating a current sense resistor connected to the AC/DC converter (FIG. 3, 50), the current flowing through it being used for further comparison and control of the battery charging current (column 6, lines 19-29). In Bell, the battery charger incorporating a current sense resistor is used in portable electronic devices, wherein the charging rate of the battery is regulated to limit a current drawn from a power source (column 1, lines 6-10). Thus, the full capacity of the input converter is efficiently utilized, and thus smaller, lighter, and less costly power converters can be used while maintaining optimum battery charging capabilities (column 2, lines 30-34).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the battery charger circuitry incorporating a current sense resistor measuring the current from an AC/DC converter, as suggested by Bell with the power management system disclosed by Yang in order to implement a charger for charging a battery of the portable computer, the charger comprising a sense resistor electrically connected with the AC/DC adapter. One of ordinary skill in the art would be motivated to do so in order to reduce the size, weight, and cost of the AC/DC adapter while maintaining optimum battery charging capabilities.

Re claim 2, Bell further teaches the power management system, further comprising a voltage divider, which is electrically connected with the AC/DC converter and is used for transforming the output DC voltage of the AC/DC adapter to a plurality of DC voltages of different values.

[Bell does not specifically state a voltage divider, which is electrically connected with the AC/DC adapter. However, Bell teaches a DC/DC converter receiving power from the power AC/DC converter (column 5, lines 20-24, FIG. 1, 12, 18) (i.e. electrically connected AC/DC and DC/DC converters) and providing a plurality of different DC sub-voltages derived from the 24V DC output of the AC/DC converter (column 5, lines 23-27) used in various portions of the notebook. Thus, Bell inherently teaches a voltage divider within the DC/DC converter, and thus Bell teaches a voltage divider, which is electrically connected with the AC/DC converter and is used for transforming the output DC voltage of the AC/DC adapter to a plurality of DC voltages of different values].

Re claim 3, Yang further discloses the power management system, wherein the logic circuit reduces the power of the portable computer received from the AC/DC adapter by reducing working frequency of a central processing unit (CPU) or the portable computer (paragraph 0029, lines 1-20, paragraph 0043, lines 1-20, paragraph 0045, lines 19-32, FIG. 4, 403-408).

Re claim 6, Yang further discloses the power management system, wherein the portable computer comprises a basic input/output system (BIOS), and the logic reads and implements a program code of the BIOS so as to analyze the alarm signal (paragraph 13-21, paragraph 0029, lines 1-14, paragraph 0043, lines 1-16).

Re claim 11, Yang discloses the power management system as per claim 9.

Yang fails to disclose, wherein the resistor is a sense resistor included in a charger of a portable computer, and the charger is used for charging a battery of the portable computer.

Bell teaches an AC/DC power converter used in notebooks providing power to both DC/DC converter and battery charger (column 3, lines 49-51, lines 55-56, FIG. 1, 18, 12, and 20). In addition, Bell teaches a control circuit monitoring both the charging voltage and charging current, controlling them in accordance with a battery charging profile (column 5, lines 49-53). Bell further teaches the control circuit incorporating a current sense resistor connected to the AC/DC converter (FIG. 3, 50), the current flowing through it being used for further comparison and control of the battery charging current (column 6, lines 19-29). In Bell, the battery charger incorporating a current sense resistor is used in portable electronic devices, wherein the charging rate of the battery is regulated to limit a current drawn from a power source (column 1, lines 6-10).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the battery charger circuitry incorporating a current sense resistor, as suggested by Bell with the power management system disclosed by Yang in order to implement wherein the resistor is a sense resistor included in a charger of a portable computer, and the charger is used for charging a battery of the portable computer. One of ordinary skill in the art would be motivated to do so with the motivation set forth in claim 1.

Re claim 12, Yang discloses the power management system as per claim 9.

Yang fails to disclose a voltage divider, which is electrically connected with the AC/DC converter and is used for transforming the output DC voltage of the AC/DC adapter to a plurality of DC voltages of different values.

Bell teaches a DC/DC converter receiving power from the power AC/DC converter (column 5, lines 20-24, FIG. 1, 12, 18) (i.e. electrically connected AC/DC and DC/DC converters) and providing a plurality of different DC sub-voltages derived from the 24V DC output of the AC/DC converter (column 5, lines 23-27) used in various portions of the notebook. Thus, Bell inherently teaches a voltage divider within the DC/DC converter, and thus Bell teaches a voltage divider, which is electrically connected with the AC/DC converter and is used for transforming the output DC voltage of the AC/DC adapter to a plurality of DC voltages of different values. In Bell, the DC/DC converter incorporating a voltage divider, generating a plurality of different DC sub-voltages is used in portable electronic devices, wherein the charging rate of the battery is regulated to limit a current drawn from a power source (column 1, lines 6-10).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use AC/DC converter connected electrically to a DC/DC converter incorporating a voltage divider for supplying a plurality of different DC voltages to various portions of the notebook, as suggested by Bell with the power management system disclosed by Yang in order to implement a voltage divider, which is electrically connected with the AC/DC converter and is used for transforming the output DC voltage of the AC/DC adapter to a plurality of DC voltages of different values. One of ordinary skill in the art would be motivated to do so with the motivation set forth in claim 1.

Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al., US Patent Appl. Pub. No. 2004/0049704 in view of Bell, U.S. Patent No. 5,723,970, and further in view of Oh, US Patent Appl. Pub. No. 2002/0073351.

Re claim 4, Yang and Bell disclose the power management system as per claim 1.

Yang and Bell fail to disclose, wherein the logic circuit reduces the power of the portable computer received from the AC/DC adapter by reducing a clock of a bus of the portable computer.

Oh teaches an apparatus and method of controlling clock frequency generation for a portable device (paragraph 0002, lines 1-4) where reducing the clock speed of a bus is done in order to extend the battery time when electric energy is fed to the portable computer from a battery (paragraph 0011, lines 1-5). Oh further teaches a PLL circuit providing the reduced bus clock frequency (FIG. 3, 220, paragraph 0027, lines 9-16, paragraph 0032, lines 1-4) being implemented with an ASIC (paragraph 0034, lines 6-11, FIG. 4, 40) (i.e. logic for reducing the bus clock frequency within the notebook). In Oh, the apparatus incorporating logic for decreasing the bus clock allows for providing lower clock frequency to corresponding devices in battery mode (paragraph 0040, lines 1-3). Thus, power consumption is reduced when a battery is supplying the electric energy (paragraph 0040, lines 3-4).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the logic for decreasing the bus clock, as suggested by Oh with the power management system disclosed by Yang and Bell in order to implement wherein the logic circuit reduces the power of the portable computer received from the AC/DC adapter by reducing a clock of a bus of the portable computer. One of ordinary skill in the art would be motivated to do so to reduce battery consumption.

Claim 14 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al., US Patent Appl. Pub. No. 2004/0049704 in view of Oh, US Patent Appl. Pub. No. 2002/0073351.

Re claim 14, Yang discloses the power management system as per claim 9.

Yang fails to disclose, wherein the logic circuit reduces the power of the portable computer received from the AC/DC adapter by reducing a clock of a bus of the portable computer.

Oh teaches an apparatus and method of controlling clock frequency generation for a portable device (paragraph 0002, lines 1-4) where reducing the clock speed of a bus is done in order to extend the battery time when electric energy is fed to the portable computer from a battery (paragraph 0011, lines 1-5). Oh further teaches a PLL circuit providing the reduced bus clock frequency (FIG. 3, 220, paragraph 0027, lines 9-16, paragraph 0032, lines 1-4) being implemented with an ASIC (paragraph 0034, lines 6-11, FIG. 4, 40) (i.e. logic for reducing the bus clock frequency within the notebook). In Oh, the apparatus incorporating logic for decreasing the bus clock allows for providing lower clock frequency to corresponding devices in battery mode (paragraph 0040, lines 1-3). Thus, power consumption is reduced when a battery is supplying the electric energy (paragraph 0040, lines 3-4).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the logic for decreasing the bus clock, as suggested by Oh with the power management system disclosed by Yang in order to implement wherein the logic circuit reduces the power of the portable computer received from the AC/DC adapter by reducing a clock of a bus of the portable computer. One of ordinary skill in the art would be motivated to do so with the motivation set forth in claim 4.

Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al., US Patent Appl. Pub. No. 2004/0049704 in view of Bell, U.S. Patent No. 5,723,970, and further in view of Pearce, US Patent No. 5,819,100.

Re claim 5, Yang and Bell disclose the power management system as per claim 1.

Yang and Bell fail to disclose, wherein the logic reduces the power of the portable computer received from the AC/DC adapter by reducing rotation rate of a hard disc of the portable computer.

Pearce teaches standby state for a disk drive when the power is removed from the rotating disk in a controlled manner ("spinning down" the disk) (column 1, lines 27-30) (i.e. reducing the disk rotation rate) during periods of inactivity (column 1, lines 31-36). Thus, the power consumption in laptop computers powered by batteries is reduced (column 1, lines 13-15, lines 43-45).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the disk "spinning down" technique, as suggested by Pearce with the power management system disclosed by Yang and Bell in order to implement wherein the logic reduces the power of the portable computer received from the AC/DC adapter by reducing rotation rate of a hard disc of the portable computer. One of ordinary skill in the art would be motivated to do so to reduce the power consumption for the portable computer powered by battery during periods of inactivity.

Claim 15 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al., US Patent Appl. Pub. No. 2004/0049704 in view of Pearce, US Patent No. 5,819,100.

Re claim 15, Yang discloses the power management system as per claim 9.

Yang fails to disclose, wherein the logic reduces the power of the portable computer received from the AC/DC adapter by reducing rotation rate of a hard disc of the portable computer.

Pearce teaches standby state for a disk drive when the power is removed from the rotating disk in a controlled manner ("spinning down" the disk) (column 1, lines 27-30) (i.e.

reducing the disk rotation rate) during periods of inactivity (column 1, lines 31-36). Thus, the power consumption in laptop computers powered by batteries is reduced (column 1, lines 13-15, lines 43-45).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the disk "spinning down" technique, as suggested by Pearce with the power management system disclosed by Yang in order to implement wherein the logic reduces the power of the portable computer received from the AC/DC adapter by reducing rotation rate of a hard disc of the portable computer. One of ordinary skill in the art would be motivated to do so with the motivation set forth in claim 5.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al., US Patent Appl. Pub. No. 2004/0049704 in view of Bell, U.S. Patent No. 5,723,970, and further in view of Jeansonne et al. US Patent No. 6,691,049.

Re claim 7, Yang and Bell disclose the power management system as per claim 1.

Yang and Bell fail to disclose, wherein the logic circuit is a keyboard mouse controller (KBC).

Jeansonne teaches a keyboard controller interacting with various input devices, including a mouse, and a battery device (column 5, lines 55-58, FIG. 1, 160, 164). Jeansonne further teaches the keyboard controller monitoring the value of the battery capacity (column 10, lines 16-23), notifying the operating system software when the battery gauge is out of calibration and sending notification to the user (column 10, lines 27-36) (i.e. battery monitoring logic with user notification). In Jeansonne, the computer system is capable of monitoring the battery gage calibration and alerting the user that a battery calibration is required (column 3, lines 3-6). Thus, enhanced computer functionality is achieved (column 3, lines 6-7).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the keyboard and mouse controller, monitoring the battery capacity, as suggested by Jeansonne with the power management system disclosed by Yang and Bell in order to implement wherein the logic circuit is a keyboard mouse controller (KBC). One of ordinary skill in the art would be motivated to do so in order to enhance the computer functionality.

Claim 17 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al., US Patent Appl. Pub. No. 2004/0049704 in view of Jeansonne et al. US Patent No. 6,691,049.

Re claim 17, Yang discloses the power management system as per claim 9.

Yang fails to disclose, wherein the logic circuit is a keyboard mouse controller (KBC).

Jeansonne teaches a keyboard controller interacting with various input devices, including a mouse, and a battery device (column 5, lines 55-58, FIG. 1, 160, 164). Jeansonne further teaches the keyboard controller monitoring the value of the battery capacity (column 10, lines 16-23), notifying the operating system software when the battery gauge is out of calibration and sending notification to the user (column 10, lines 27-36) (i.e. battery monitoring logic with user notification). In Jeansonne, the computer system is capable of monitoring the battery gage calibration and alerting the user that a battery calibration is required (column 3, lines 3-6). Thus, enhanced computer functionality is achieved (column 3, lines 6-7).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the keyboard and mouse controller, monitoring the battery capacity, as suggested by Jeansonne with the power management system disclosed by Yang in order to implement wherein the logic circuit is a keyboard mouse controller (KBC). One of ordinary skill in the art would be motivated to do so with the motivation set forth in claim 7.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al., US Patent Appl. Pub. No. 2004/0049704 in view of Bell, U.S. Patent No. 5,723,970, and further in view of Atkinson, US Patent No. 6,498,460.

Re claim 8, Yang and Bell disclose the power management system as per claim 1.

Yang and Bell fail to disclose, wherein the logic circuit is a south bridge chip.

Atkinson teaches a throttle logic (FIG. 1, 130), implemented as a part of a south bridge device (column 4, lines 34-38). In Atkinson, the throttle logic is used for reducing the computer's power and, accordingly, the power budget of the AC adapter is not exceeded, while at the same time, the battery continues to be charged at the maximum rate possible (column 5, lines 10-15). Thus, system crashes are avoided (column 2, lines 35-39).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the throttle logic incorporated within a south bridge, as suggested by Atkinson with the power management system disclosed by Yang and Bell in order to implement wherein the logic circuit is a south bridge chip. One of ordinary skill in the art would be motivated to do so in order to prevent system crashes.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Yang et al., US Patent Appl. Pub. No. 2004/0049704 in view of Atkinson, US Patent No. 6,498,460.

Re claim 18, Yang discloses the power management system as per claim 9.

Yang fails to disclose, wherein the logic circuit is a south bridge chip.

Atkinson teaches a throttle logic (FIG. 1, 130), implemented as a part of a south bridge device (column 4, lines 34-38). In Atkinson, the throttle logic is used for reducing the computer's power and, accordingly, the power budget of the AC adapter is not exceeded, while at the same

time, the battery continues to be charged at the maximum rate possible (column 5, lines 10-15). Thus, system crashes are avoided (column 2, lines 35-39).

It would have been obvious to one of ordinary skill in the art at the time of applicant's invention to use the throttle logic incorporated within a south bridge, as suggested by Atkinson with the power management system disclosed by Yang in order to implement wherein the logic circuit is a south bridge chip. One of ordinary skill in the art would be motivated to do so with the motivation set forth in claim 8.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stefan Stoynov whose telephone number is (571) 272-4236. The examiner can normally be reached on 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Lynne Browne can be reached on (571) 272-3670. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SS

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